



February 17, 2015

*Transmitted via LCFS Comment Portal*

Mary D. Nichols  
Chairman  
California Air Resources Board  
P.O. Box 2815  
Sacramento, CA 95812

**Re: Comments on Proposed LCFS Readoption**

Dear Ms. Nichols,

Airlines for America (A4A) appreciates the opportunity to comment on the Air Resources Board's (ARB) proposed readoption of the Low Carbon Fuel Standard (LCFS).<sup>1</sup> We write to request that ARB include sustainable alternative jet fuel as an eligible credit-generating fuel under the LCFS. The U.S. airline industry has a strong record of fuel efficiency improvements and greenhouse gas (GHG) emissions reductions, and A4A and its members seek to build further on that record through the development and deployment of sustainable alternative jet fuel. There is particularly great interest among A4A members and biofuel producers in producing and utilizing such jet fuel in the California market. Sustainable alternative jet fuel (hereinafter referred to as "bio-jet fuel") is a "drop-in ready" fuel product – fully compatible with and capable of replacing petroleum jet fuels – that can be sustainably produced through the processing of waste oils and other biomass-based feedstocks, thereby resulting in reduced lifecycle GHG emissions relative to petroleum-based jet fuel. Unfortunately, the production of bio-jet fuel is currently *disincentivized* in California because biofuel producers can only generate LCFS credits for biofuel that displaces conventional ground transportation fuels. A4A urges ARB to allow for all low carbon transportation fuels to generate credits under the Clean Fuels Program. Such an approach would eliminate unnecessary distortions in the biofuels market, support the developing California advanced biofuels industry, and provide an additional pool of available credits to contain the costs of the LCFS.

For the past several decades, the U.S. airlines have dramatically improved fuel and GHG efficiency by investing billions in fuel-saving aircraft and engines, innovative technologies like winglets (which improve aerodynamics) and cutting-edge route-optimization software. As a result, between 1978 and 2013, the U.S. airline industry improved its fuel efficiency by 120 percent, resulting in 3.6 billion metric tons of CO<sub>2</sub> savings – equivalent to taking 22 million cars off the road on average in each of those years. Further, data from the Bureau of Transportation Statistics confirms that U.S. airlines burned 8 percent less fuel in 2013 than they did in 2000, resulting in an 8 percent reduction in CO<sub>2</sub> emissions, even though they carried 17 percent more passengers and cargo on a revenue-ton-mile basis.

But our airlines are not stopping there. A4A and our members are part of a global aviation coalition that has committed to a 1.5% annual average fuel efficiency improvement through 2020 and carbon neutral

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<sup>1</sup> A4A is the principal trade and service organization of the U.S. scheduled airline industry. A4A members and affiliates transport more than 90% of U.S. airline passenger and cargo traffic. The members of the association are: Alaska Airlines, Inc.; American Airlines Group (American Airlines and US Airways); Atlas Air, Inc.; Delta Air Lines, Inc.; Federal Express Corporation.; Hawaiian Airlines; JetBlue Airways Corp.; Southwest Airlines Co.; United Continental Holdings, Inc.; and United Parcel Service Co. Air Canada is an associate member.

growth from 2020, subject to critical aviation infrastructure and technology advances achieved by government and industry. The initiatives our airlines are undertaking to further address GHG emissions are designed to responsibly and effectively limit their fuel consumption, GHG contribution and potential climate change impacts, while allowing commercial aviation to continue to serve as a key contributor to the U.S. economy.

The availability of bio-jet fuel in significant quantities is one key pillar to the achievement of the industry goals, and A4A and its members are working to lay the groundwork for the establishment of a sustainable aviation biofuels industry. A4A is a founding member of the Commercial Aviation Alternative Fuel Initiative<sup>®</sup> (CAAFI), a public-private partnership with the Federal Aviation Administration (FAA) and other stakeholders that is working to hasten the development and deployment of such fuels. Among other accomplishments, CAAFI helped lead the effort for specifications certifying three alternative jet fuels.

In California, United Airlines has executed an agreement with AltAir Fuels for the purchase of up to 15 million gallons of renewable jet fuel over a three-year period to begin in 2015. AltAir has created 100+ jobs in the Paramount area and added to the tax base considerably by taking over an idled refinery that had no active plans to restart. With appropriate treatment of bio-jet fuel under the LCFS, other facilities would likely follow, making California the undisputed hub of bio-jet fuel production.

Allowing bio-jet fuel producers to generate LCFS credits would significantly improve the economics of new and existing facilities by allowing them to generate credits from all transportation fuels produced, while also creating additional compliance flexibility for regulated parties. The AltAir facility, as well as other potential plants utilizing a similar conversion technology, can necessarily produce both diesel and bio-jet fuel. Given that the LCFS is intended to spur investment in facilities producing low carbon fuels that will enable the standard to be met, ARB should not dilute the investment signal for these facilities by not allowing significant portions of their fuel production to generate credits. Further, it would be inappropriate for ARB to create market distortions by crediting diesel and not bio-jet fuel, thereby creating a financial disincentive for the production of bio-jet fuel even though both fuels deliver similar GHG reductions. Indeed, as a result of the LCFS not crediting bio-jet fuel, AltAir is reducing the total available production of renewable jet fuel for United and others to purchase. Unnecessarily creating such disincentives for producers like AltAir (and thereby suppressing demand from airlines like United) is not only contrary to the GHG reduction goals of the LCFS, but it is particularly inappropriate in light of the critical role the airline industry can play in helping to obtain financing for facilities through dedicated off-take agreements, a role that the airline industry is uniquely situated to fill.

The proposal's discussion of the future availability of renewable diesel for LCFS compliance cites several facilities that have already contractually committed to producing substantial volumes of bio-jet fuel for the airline industry. These include the above-mentioned AltAir facility, as well as planned facilities from Red Rock Biofuels in Oregon and Fulcrum Bioenergy in Nevada.<sup>2</sup> Instead of relying on the LCFS to incentivize these facilities to devote their production only to renewable diesel, ARB should allow for credit from either renewable diesel or bio-jet fuel and allow the market to determine where the fuel is ultimately allocated. Such an approach would lend more certainty to ARB's fuel availability projections, eliminate concerns that the LCFS may inhibit bio-jet fuel production, and lower compliance costs for regulated parties.

Crediting bio-jet fuel as a cost-containment mechanism is consistent with the direction in ARB Resolution 11-39 to explore "expansion of the LCFS credit trading market" and "incorporation of a flexible compliance

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<sup>2</sup> <http://www.prnewswire.com/news-releases/united-airlines-and-altair-fuels-to-bring-commercial-scale-cost-competitive-biofuels-to-aviation-industry-210073841.html>;  
<http://www.swamedia.com/releases/southwest-airlines-announces-purchase-agreement-with-red-rock-biofuels?l=en-US>; [http://www.cathaypacific.com/cx/en\\_HK/about-us/press-room/press-release/2014/Cathay-Pacific-invests-in-sustainable-biojet-fuel-developer.html](http://www.cathaypacific.com/cx/en_HK/about-us/press-room/press-release/2014/Cathay-Pacific-invests-in-sustainable-biojet-fuel-developer.html)

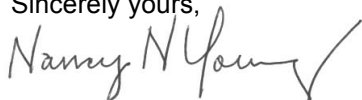
mechanism...<sup>3</sup> While ARB has included several new forms of cost containment in the proposal, the simplest form of cost containment—enlarging the pool of available credits by allowing all low carbon transportation fuels used in California to generate credits—is unnecessarily absent from the proposal. In addition, crediting of bio-jet fuel could contribute to cost containment by providing an additional avenue for low carbon fuel use that is unaffected by ground transportation blending constraints.

We agree with ARB's general exemption of aircraft fuels from California's LCFS mandates.<sup>4</sup> Subjecting aircraft fuels to annual "carbon intensity" standards would raise serious federal preemption issues and would not be appropriate given the rigorous jet fuel specifications that make producing jet fuels a "higher hurdle" than producing ground-based fuels. However, ARB does have the authority to amend the LCFS regulations to create *incentives* to promote the use of low carbon, bio-jet fuels in aircraft by allowing credit for such fuels. By promoting the voluntary production and use of bio-jet fuel, ARB would not, in our view, cross the line into impermissibly regulating aircraft fuels, but rather would simply be creating opportunities for airlines to better support California's GHG objectives.

Notably, allowing bio-jet fuel to generate LCFS credits would be a measure fully in line with the U.S. Environmental Protection Agency's approach under the Renewable Fuel Standard (RFS) regulations. The RFS explicitly allows for the generation of Renewable Identification Numbers (RINs) for the production of bio-jet fuel, although the RFS appropriately does not mandate the production or use of any volume of aviation biofuel.

A4A strongly urges ARB to adopt a similar approach to expand opportunities for new biofuel production facilities and create additional compliance flexibility for regulated parties. Several stakeholders have previously suggested allowing such a credit for bio-jet fuel under the LCFS. Although ARB declined to include such a provision in the original regulations, it committed to revisiting the issue during the mandatory program review in 2011.<sup>5</sup> While ARB did not address the issue in the 2011 program review, we urge ARB to do so now. Given the strong interest in bio-jet fuel in California, we believe the time is ripe for ARB to include a provision crediting the production of such fuel.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Nancy N. Young", followed by a checkmark.

Nancy N. Young  
Vice President, Environmental Affairs

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<sup>3</sup> See Resolution 11-39, Amendments to the Low Carbon Fuel Standard Regulation, p. 9 (December 16, 2011).

<sup>4</sup> See Cal. Code Regs. tit. 17, § 95480.1(d) (2011).

<sup>5</sup> See Final Statement of Reasons at 285-286 (December 2009).